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Signal Processing Letters, IEEE, Volume: 11, Issue: 10, Oct. 2004

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Hernandez, J.R.; Perez-Gonzalez, F.;

Proceedings of the IEEE, Volume: 87, Issue: 7, July 1999

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[\[Abstract\]](#) [\[PDF Full-Text \(416 KB\)\]](#) **IEEE JNL****4 Attacking visible watermarking schemes**

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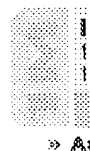
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Progressive image watermarking

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Dept. of Electr. & Comput. Eng., Carnegie Mellon Univ., Pittsburgh, PA, USA;

This paper appears in: Multimedia and Expo, 2000. ICME 2000. 2000 IEEE International Conference on

Meeting Date: 07/30/2000 - 08/02/2000

Publication Date: 30 July-2 Aug. 2000

Location: New York, NY USA

On page(s): 1025 - 1028 vol.2

Volume: 2

Reference Cited: 7

Number of Pages: 3 vol. xxxv+17778

Inspec Accession Number: 6704253

Abstract:

Progressive transmission of images is very useful in many applications, especially image transmission over the Internet. To view an image, people would want to see part of the image while the image transmission is in progress, rather than having to wait until the end of the image transmission. On the other hand, the ease of transmitting and copying of images creates the need to use digital watermarking to embed the information seamlessly into the media. We propose a progressive image watermarking scheme. In this scheme, the watermark is embedded in such a way that we can see part of it even when the watermarked image is still being transmitted. As transmission progresses, the retrieved watermark has a decreasing bit error rate. Our proposed methods not only transmit the watermarked image progressively, but also select watermark embedding locations robust to various attacks.

Index Terms:

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